IN THE SPECIFICATION

Please amend the paragraph at page 21, lines 18-22, as follows:

The LUV signal from the second color converting unit 31 [[are]] is input to the smoothing filter 71 and the selector 72 in the smoothing unit 81 shown in Fig. 11. The smoothing filter 71 carries out a smoothing process on the LUV signal received from the color converting unit 31 and outputs the smoothed LUV signal to the selector 72.

Please amend the paragraph at page 31, lines 5-15, as follows:

[[The]] In one aspect, the image processing apparatus according to claim 1 comprises includes an image input unit that inputs an RGB signal corresponding to a color image, a first color conversion unit that converts the RGB signal input from the image input unit to a CMY signal, an image attribute extraction unit that extracts an image attribute from the CMY signal, and an adaptive image processing unit that adaptively carries out, in accordance with the image attributes extracted from the CMY signal, image processing of color image signals of the color image. Consequently, highly accurate image attribute can be extracted from the CMY signal that has a high precision of color separation and therefore an adaptive image processing can be carried out.

Please amend the paragraph at page 31, lines 16-21, as follows:

[[In]] As another feature of the image processing apparatus according to claim 2, the image attribute extraction unit according to claim 1 calculates can calculate as the image attribute an edge amount of the color image. Consequently, in addition to [[the]] above-noted effects of claim 1, a high edge amount can be obtained in a color character-on-color background setup, thereby achieving sufficient edge enhancement.

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Please amend the paragraph at page 31, line 22 to page 32, line 4, as follows:

[[In]] <u>As another feature of</u> the image processing apparatus ~~according to claim 3~~, the image attribute extraction unit ~~according to the claim 1 calculates~~ <u>can calculate</u> as the image attribute an image area separating signal that separates an image area. Consequently, in addition to [[the]] <u>above-noted</u> effects ~~of claim 1~~, errors relating to color judgment can be considerably reduced as image area separation is carried out using the CMY signal that has a high precision of color separation. Further, highly accurate halftone separation can also be carried out.

Please amend the paragraph at page 32, lines 5-13, as follows:

[[In]] <u>As another feature of</u> the image processing apparatus ~~according to claim 4~~, the adaptive image processing unit ~~according to any one of claims 1 through 3 carries~~ <u>can carry</u> out an adaptive image processing on an RGB signal, or a luminance chrominance difference signal or a brightness chromaticity signal of the color image. Consequently, in addition to <u>above-noted</u> effects ~~of any one of claims 1 through 3~~, the adaptive image processing of the filtering process can be carried out in any color space, as the CMY signal, which is converted in the CMY color space, is used only for extracting the image attribute.

Please amend the paragraph at page 32, line 14 to page 33, line 1, as follows:

[[The]] <u>In another aspect, the</u> image processing apparatus ~~according to claim 5 comprises~~ <u>includes</u> an image input unit that inputs an RGB signal corresponding to a color image, a first image attribute extraction unit that extracts a first image attribute from the RGB signal input from the image input unit, a first conversion unit that converts the RGB signal input from the image input unit into a CMY signal, a second image attribute extraction unit that extracts a second image attribute from the CMY signal, and an adaptive image

processing unit that adaptively carries out, based on the first image attribute and the second

image attribute, image processing on color image signals of the color image. Consequently, a

highly accurate image attribute can be extracted from the CMY signal that has a high

precision of color separation and therefore an adaptive image processing can be carried out.

Please amend the paragraph at page 33, lines 2-9, as follows:

[[In]] As another feature of the image processing apparatus according to claim 6, the

first image attribute extraction unit according to claim 5 calculates can calculate as the first

image attribute an image area separating signal that separates an image area, and the second

image attribute extraction unit calculates as the second image attribute an edge amount of the

color image. Consequently, in addition to [[the]] above-noted effects of claim 5, a high edge

amount can be obtained in a color character-on-color background setup, thereby achieving

sufficient edge enhancement.

Please amend the paragraph at page 33, lines 10-17, as follows:

[[In]] As another feature of the image processing apparatus according to claim 7, the

adaptive image processing unit according to the claim 5 or 6 can adaptively carries carry out

image processing on the RGB signal or a luminance chrominance difference or a brightness

chromaticity signal of the color image. Consequently, in addition to [[the]] above-noted

effects of claim 5 or 6, the adaptive image processing of the filtering process can be carried

out in any color space, as the CMY signal that is converted in the CMY color space is used

only for extracting the image attribute.

Please amend the paragraph at page 33, line 18 to page 34, line 7, as follows:

[[The]] In another aspect, the image processing apparatus ~~according to the claim 8~~ ~~comprises~~ includes an image input unit that inputs an RGB signal corresponding to a color image, a first conversion unit that converts the RGB signal into a CMY signal, a second conversion unit that converts the RGB signal into a luminance chrominance difference signal or a brightness chromaticity signal, a first image attribute extraction unit that extracts a first image attribute from the luminance chrominance difference signal or the brightness chromaticity signal, a second image attribute extraction unit that extracts a second image attribute from the CMY signal, and an adaptive image processing unit that adaptively carries out, based on the first image attribute and the second image attribute, image processing on color image signals. Consequently, highly accurate image attribute can be extracted from the CMY signal that has a high precision of color separation and therefore an adaptive image processing can be carried out.

Please amend the paragraph at page 34, lines 8-15, as follows:

[[In]] As another feature of the image processing apparatus ~~according to claim 9~~, the first image attribute extraction unit ~~according to claim 8 calculates~~ can calculate as the first image attribute an image area separating signal that separates an image area, and the second image attribute extraction unit calculates as the second image attribute an edge amount of the color image. Consequently, in addition to [[the]] above-noted effects ~~of claim 8~~, a high edge amount can be obtained in a color character-on-color background setup, thereby achieving sufficient edge enhancement.

Please amend the paragraph at page 34, lines 16-23, as follows:

[[In]] As another feature of the image processing apparatus ~~according to claim 10~~, the adaptive image processing unit ~~according to claim 8 or 9~~ can adaptively ~~carries~~ carry out image processing of the RGB signal or a luminance chrominance difference signal or a brightness chromaticity signal of the color image. Consequently, in addition to [[the]] above-noted effects ~~of claim 8 or 9~~, the adaptive image processing of the filtering process can be carried out in any color space, as the CMY signal that is converted in the CMY color space is used only for extracting the image attribute.

Please amend the paragraph at page 34, line 24 to page 35, line 5, as follows:

[[In]] As another feature of the image processing apparatus ~~according to claim 11~~, the second image attribute extraction unit ~~according to claim 6 or 9 calculates~~ can calculate as the second image attribute the edge amounts of a C signal or an M signal of the CMY signal. Consequently, in addition to [[the]] above-noted effects ~~of claim 6 or 9~~, only the C signal and M signal are employed for calculating the edge amount value, thereby enabling reduction in the scale of the hardware.

Please amend the paragraph at page 35, lines 6-12, as follows:

[[In]] As another feature of the image processing apparatus ~~according to claim 12~~, the first color conversion unit ~~according to any one of claims 1 through 11 varies~~ can vary a conversion coefficient for conversion of the RGB signal to the CMY signal in accordance with an original image type mode. Consequently, appropriate conversion coefficient can be used for original images such as a print image and photographic print image that have greatly differing hue characteristics, thereby making the color separation precision high.

Please amend the paragraph at page 35, lines 13-19, as follows:

[[In]] As another feature of the image processing according to claim 13, the original

image type mode is a print image mode, a photographic printing paper image mode, or a

photocopy image mode (generation mode). Consequently, in addition to [[the]] above-noted

effects of claim 12, the color separation precision of the CMY signal in the print image mode,

the photographic printing paper image mode, or the photocopy image mode (generation

mode) can be increased.

Please amend the paragraph at page 35, line 20 to page 36, line 2, as follows:

[[The]] In another aspect, an image processing method according to claim 14

comprises includes the steps of inputting an RGB signal corresponding to a color image,

converting the RGB signal into a CMY signal, extracting an image attribute from the CMY

signal, and an adaptive image processing of color image signals in accordance with the

extracted image attribute. Consequently, highly accurate image attribute can be extracted

from the CMY signal that has a high precision of color separation and therefore an adaptive

image processing can be carried out.

Please amend the paragraph at page 36, lines 3-10, as follows:

[[The]] As another aspect, a program according to claim 15 that causes a computer to

execute the steps of inputting an RGB signal corresponding to a color image, converting the

RGB signal into a CMY signal, extracting an image attribute from the CMY signal, and an

adaptive image processing of color image signals in accordance with the extracted image

attribute. Consequently, a highly accurate image attribute can be extracted from the CMY

signal that has a high precision of color separation and therefore an adaptive image

processing can be carried out.